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November 15, 2013

Ex Parte

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: Wireless E911 Location Accuracy Requirements, PS Docket No. 07-114

Dear Ms. Dortch:

Yesterday, TruePosition filed "Reply Comments" in this proceeding that repeat and expand upon the incorrect and misleading claims recently made about the Commission's 911 call data from the TruePosition-funded Find Me 911 Coalition.[1] Verizon is filing this initial response to ensure that TruePosition's claims do not go unanswered before Monday's workshop.

Claim: "The CalNENA Report graphically depicted a significant decrease and overall poor performance in the delivery of Phase II location information to PSAPs" and "concluded that by the end of 2012 not one of the nationwide wireless carriers had met the FCC's Phase II standards for 90% of 911 calls delivered in those geographic areas."[2]

Any suggestion that Verizon does not comply with Commission rules is inexplicable. For those California PSAPs, Verizon delivered Phase II data for 91-95 percent of all completed calls for use by the PSAPs consistent with Commission rules and public safety practices, and with Verizon's network-wide level of 92 percent.[3] As Verizon and others have explained in the record, the CalNENA Report (and the other 911 call data TruePosition cites) measured the extent to which the PSAPs retrieved Phase II data that was available to them during the 911 call, not whether Phase II location was delivered consistent with the Commission's rules and established practices that were developed in conjunction with the public safety community to accommodate PSAP architecture.[4] The record further confirms that PSAPs that perform the look up as a standard procedure are able to retrieve the Phase II data at high levels. TruePosition nonetheless cites to Section 20.18(b) of the rules to claim that delivery of the location information for the PSAP to retrieve is insufficient. But that rule by its terms relates only to *basic 911* (i.e. routing

[1] Verizon responded to those claims yesterday. Letter from Nneka Chiazor, Verizon, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 07-114, filed Nov. 14, 2013 ("Verizon FindMe911 Letter").

[2] TruePosition Reply Comments, PS Docket No. 07-114, filed Nov. 14, 2013, at 3 ("TruePosition Reply").

[3] *See* Letter from Nneka Chiazor, Verizon, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 07-114, filed Sept. 11, 2013, at 3-6 ("Verizon CalNENA Letter").

[4] *See* CalNENA Report, Attachment at 2; Verizon FindMe911 Letter at 2.

the voice call to the appropriate PSAP), not enhanced 911.[5] E911 Phase II service is governed by Sections 20.18(e)-(h) and the Commission's decisions interpreting them, which ratified the carrier's delivery of the location information to a point in the network known as the Mobile Positioning Center or "MPC" (for the PSAP to retrieve) as a permissible method of providing Phase II service.[6] TruePosition makes no effort to address these precedents, and ignores the public safety guidelines and practices that accommodate this architecture and delivery method.[7]

Claim: Verizon argues that Assisted-GPS ("A-GPS) technology "has a time-to-first-fix (TTFF) of roughly 30 seconds and therefore is not typically available to a PSAP when the 911 call initially connects."[8]

Verizon has made no such arguments. It has explained that its average time in which updated location information is available to PSAPs is 12-15 seconds – substantially less than "roughly 30 seconds" – and that for a substantial percentage of GPS-derived location fixes is able to provide Phase II data with the initial look-up.[9] In fact, information submitted by other public safety stakeholders in the record (whom TruePosition ignores), confirm that Verizon typically transmits Phase II data to the MPC far more quickly than 30 seconds.[10]

Claim: Verizon argues that "the PSAPs covered in the CalNENA Report failed, for the most part, to wait the required 30 seconds and then to 'rebid' to receive updated Phase II information."[11]

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[5] TruePosition Reply at 5 n.6; *see* 47 C.F.R. § 20.18(b) (titled "*Basic 911 Service"* and requiring carriers to "transmit all wireless 911 calls without respect to their call validation process to" an appropriate PSAP, "provided that 'all wireless 911 calls' is defined as 'any call initiated by a wireless user dialing 911 on a phone using a compliant radio frequency protocol of the serving carrier.'").

[6] *See* Letter from Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, to Marlys Davis, King County E911 Program Office, CC Docket No. 94-102, dated May 7, 2001, at 4, *aff'd on recon. In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request of King County, Washington*, Order on Reconsideration, 17 FCC Rcd. 14789, ¶¶ 8-10 (2002) (PSAPs are responsible for ALI database upgrades and trunks between the ALI database and PSAP premises); *In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Petition of City of Richardson, Texas*, Order, 16 FCC Rcd 18982, ¶ 17 (2001) (a carrier's Phase II deployment obligation is triggered where PSAP has timely requested "an additional upgrade to the ALI database *so that it will query the [MPC] at the appropriate time to acquire the Phase II latitude/longitude data*." (emphasis added)); *see also* Letter from Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, to Kathleen B. Levitz, BellSouth Corp., Luisa Lancetti, Sprint PCS, and John T. Scott, III, Verizon Wireless, CC Docket No. 94-102, at 2 (WTB rel. Oct. 29, 2002) (clarifying the E2 interface "used to send a query from the ALI database to a [MPC] … requesting the transmission of location information back to the ALI database … is a software upgrade to the ALI database" and thus the PSAP's responsibility).

[7] *See* TruePosition Reply at 14-15 (arguing that meeting "NENA guidelines or 'best practices'" on Phase II delivery is insufficient).

[8] *Id*. at 4.

[9] *See* Verizon CalNENA Letter at 5.

[10] *See* Letter from Marlys Davis, E-911 Program Office, King County, to Marlene H. Dortch, in PS Docket No. 07-114, filed Sept. 25, 2013, at 3-4 (using a re-bid of *20 seconds*, Phase II was available for 98 percent of outdoor Verizon calls, and 93 percent of indoor calls); State of California Comments in PS Docket No. 07-114, filed Sept. 25, 2013, at 2 (in a limited trial of location based 911 call routing, "56.0% of [Verizon Wireless] 9-1-1 calls receive Phase II location information within the configured six seconds allowed from the initial location request.").

[11] TruePosition Reply at 4.

Verizon did not suggest that those PSAPs failed to wait the required 30 seconds and then "re-bid." Verizon explained that in many cases the PSAPs declined to look up the Phase II information *at all*, and made the self-evident point that given Verizon's 12-15 second average, had those PSAPs followed NENA's best practice of re-bidding 15 to 30 seconds after the receipt of the initial location bid response, "in most cases a PSAP call taker following best practices should be able to retrieve the more accurate Phase II location with that re-bid."[12]

Claim: Verizon "claim[s] that … Phase II location information was available to these PSAPs for calls with duration of at least 30 seconds between 90% and 95% of the time."[13]

Verizon has made no such claim. TruePosition disingenuously cites to Verizon's comments in support of this assertion. As noted above, Verizon typically makes data available on average within 12-15 seconds – far earlier than 30 seconds. Whether a 911 call lasts more than 30 seconds is irrelevant to Verizon's performance, and Verizon never suggested as such.

Claim: Verizon's comments indicate that A-GPS failed to provide Phase II location information for approximately 22 percent of 911 calls for the CalNENA PSAPs.[14]

TruePosition incorrectly cites to Verizon's workshop comments as the basis for this claim and arbitrarily excludes calls with Phase II information. Verizon explained that its A-GPS solution uses three location determination techniques: GPS-only, a hybrid of GPS and AFLT, and AFLT-only (hence the term "*Assisted*-GPS").[15] Further, Verizon's data for the 91-95 percent of calls for the CalNENA jurisdictions that generated "Phase II" information (not 90 percent, as TruePosition claims) reflect that 86 percent involved GPS-only location, 4 percent were hybrid and 10 percent were AFLT-only. TruePosition's 22 percent figure, however, only treats "GPS-only" as valid Phase II location information, and classifies hybrid and AFLT location as "non-Phase II."[16] In fact, Verizon's county-level Phase II accuracy compliance measurements include both hybrid and AFLT location fixes, and Verizon has met the accuracy requirements in all counties where it provides service. AFLT is thus not an "enormous problem" as TruePosition suggests, but an important component of a robust and compliant Phase II solution.

Claim: "[C]all-routing based on Phase I information can often direct the emergency call to an incorrect PSAP that is much farther away from the victim than the closest PSAP, thereby further delaying the dispatch of life-saving services."[17]

911 call routing based on Phase I location (cell site location) is not directed to an "incorrect PSAP." 911 calls are routed to a particular PSAP based on pre-determined arrangements between carriers and PSAPs, and between PSAPs themselves, using the cell sector from which the call originated. Where a particular cell sector is at or near a county line or similar PSAP area boundary, one PSAP can arrange for the neighboring jurisdiction to handle

[12] *See* Verizon CalNENA Letter at 5-6.

[13] TruePosition Reply at 4-5.

[14] *Id.* at 5, 8.

[15] *See* Comments of Verizon and Verizon Wireless, PS Docket No. 07-114, filed Sept. 25, 2013, at 4.

[16] *Id.*

[17] TruePosition Reply at 11.

the call. And if those PSAPs mutually decide to change those arrangements, Verizon will accommodate them. In fact, Verizon worked extensively with jurisdictions throughout California in a much-touted effort to modify 911 call routing arrangements among local jurisdictions and the California Highway Patrol using cell site location information.[18] Verizon also recently participated in a trial of "caller location based routing" involving a few PSAPs in California, but it remains to be seen whether it results in any improvement in 911 call routing beyond the established collaborative arrangements used today.

Claim: OET recommended that carriers route 911 calls to PSAPs based on Phase II location information. [19]

A more extensive excerpt of OET's recommendation illustrates the selective and misleading use of the excerpt TruePosition provided. OET recommended that, in order to accommodate the objectives of (1) making location information available for call routing and "to provide rapid location information to the dispatcher," while (2) also providing more accurate information available to dispatchers:

> *[A]vailable location information* should be delivered with call completion, but verification of the accuracy of the information may take place shortly after call completion. Any test protocol should identify the time to first fix (*including fixes from Phase I or other location methods), which will be used to route calls to the proper PSAP*, and should also employ a reasonable time limit for tests of location accuracy. An acceptable time limit for such testing is 30 seconds after the call is sent.[20]

Thus, OET plainly envisioned that Phase I location would be used for 911 call routing, and wireless carriers already adhere to the "clearly stated guidelines" in OET Bulletin 71.

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Please contact the undersigned if there are questions concerning this filing.

Sincerely,

Neeka Chiarot

[18] *See* California Technology Agency, *California Information Technology Strategic Plan - 2013 Update*, at 9 (2013) (explaining that the Routing on Empirical Data (RED) Project "dramatically improved the routing of wireless calls to the 9-1-1 system with an innovative solution that uses the location of wireless 9-1-1 callers and the location of the corresponding cell tower to determine the jurisdiction that should accept the call …."), http://www.cio.ca.gov/pdf/2013-Strategic-Plan-Update.PDF.

[19] TruePosition Reply at 11.

[20] Office of Engineering and Technology, OET Bulletin No. 71, *Guidelines for Testing and Verifying the Accuracy of Wireless E911 Location Systems*, Apr. 12, 2000, at 5-6 (emphasis added).